

Newsletter for Birdwatchers

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WATERFOWL DIVISION NEWS

WATERFOWL IN WEST AFRICA

Waterfowl counts have been carried out irregularly for over 30 years in West Africa by the CRBPO (France), IUCN, and various National Parks Services. Although many articles and reports have been published about the results of various expeditions, they dealt mainly with Anatidae (ducks) and no overview of the results has yet been made:

Most of the available data have now been computerised in IWRB's African Database. A detailed analysis of the available information will appear later in 1990 in an IWRB Special Publication, in French. These analyses have been funded through grants from SRETIE (French Ministry of the Environment), and by a grant from the Swiss Government, via the Ramsar Bureau.

The results show that the irregularity of coverage of West African wetlands seriously limits our understanding of the various populations' movements and dynamics. It is therefore impossible to assess trends in population sizes. Further more, the report suggests that it may well be impossible actually to define a size for populations in which one or two dry years may bring the numbers to only one fifth or one tenth of the maximum. However, an estimate of maximum population sizes is provided for various species. For some species they may well be the first available estimates.

The counts enable identification of a provisional list of sites of international importance for individual species in West Africa. This list demonstrates the need for the future



Concentration of Whistling ducks and pelicans in the Djoudj National Park, Senegal. (Photo: M. Moser)

consideration of criteria of importance not based solely on averages as they were up to now. Due to variable drought conditions and intensity of coverage, such criteria may not always identify crucial wetlands in extreme conditions of drought. Data for these important sites are therefore presented with little treatment, in order to stimulate further research.

Most Sahelian countries are realizing the vital importance to conserve their wetlands through sustainable use to achieve maximum benefits for people. This report aims to help in assessing the ecological wealth of these same wetlands, and where nature conservation priorities might lie.

Christian Perennou
IWRB

ASIAN SYMPOSIUM – ANNOUNCEMENT

In association with the Pakistan's National Council for the Conservation of Wildlife, IWRB is planning to hold an International Symposium on Wetland and Waterfowl Conservation in Asia. The meeting will be held from 5-11 December 1991 in Pakistan.

The symposium will review the status of wetlands and waterfowl in West and South Asia, building on the results of the *Directory of Asian Wetlands* and the Asian Waterfowl Census. An Action Plan to develop international cooperation for the conservation of the West and South Asian migratory waterfowl flyways will be developed during the meeting. Offers of papers and posters on the Status and Conservation of wetlands and waterfowl, national wetland conservation programmes, waterfowl flyways, threats and threatened waterfowl species are welcomed.

Those wishing to present a paper/poster should write to Christian Perennou at IWRB with an abstract of not more than 400 words.

A final announcement and registration form will be distributed in January 1991.

ASIAN WATERFOWL CENSUS

For the fourth consecutive year, the Asian Waterfowl Census was organized in 1990, this time in cooperation with our partner, the Asian Wetland Bureau. Once again, it has been a record year with at least 26 countries participating. This year, we especially welcome the first participation of Dubai (United Arab Emirates), the Kingdom of Saudi Arabia, Brunei Darussalam, the Philippines, Papua New Guinea and Singapore, while USSR (SSR of Turkmenistan) has contributed fifteen years of data up to 1990. We thank all the National Coordinators who work extremely efficiently. Most of the data from Asia is usually received by May, which allows the publication of the annual report several months before the next census—providing the participants with valuable feedback.

The 1990 data are presently being computerized, and the report should be published in the autumn. A first International Symposium, in Pakistan in December 1991, will review the achievements of the first five years of the census in its western range, and provide a forum to plan the future.

IWC DEVELOPMENTS

For many migrating waterfowl, the IWRB International Waterfowl Census (IWC) is the only tool for identifying conservation priorities. It has played a major role in clarifying the status and distribution of particular species, and in identifying key sites on different flyways. In regions such as the Western Palearctic, most of the key sites are well known, and the main role of the IWC is as a management tool; in contrast there is still much basic information to reveal for waterfowl species in Africa, Asia, Oceania and the Neotropics.

The extension of the IWC to several new regions has prompted measures to ensure that the census operates with maximum efficiency, and to give the maximum amount of conservation benefits for each site surveyed. This has included new designs for census forms, establishment of computerised databases, and a re-evaluation of their methods for calculating population trends.

A major step forward has been the production of a manual in French and English for the organisers of the IWC counting networks. The manual details the processes involved in coordinating counts, the requirements of an ideal counting network, the problems encountered in trying to improve networks, and some possible solutions for the commoner problems.

Software

A software package has also been prepared that provides an input, edit and checking facility for IWC data. The software produces a data set that exactly suits the requirements of IWRB and is designed to run on any IBM compatible PC. The package is supplied with a small technical manual. IWRB headquarters will follow up the manual and software package with support and 'coordinators can receive the manual and software free of charge and are encouraged to contact IWRB over any queries or problems they may have. Others can receive the software and its manual for UK£ 15.00. It is ideally suited for any local coordinator of a counting network. IWRB is planning to build on this software by producing analysis and data retrieval programs. Suggestions and constructive criticism from those using the package will therefore be very welcome and should be addressed to the Database Officer at IWRB Headquarters in Slimbridge.

The production of the manual and software package has generously been financed by the Office National de la Chasse (French Ministry of the Environment).

Review

Following the appointment of the new Head of the Waterfowl Division, and with contracts from the European Community (DG XI) and the UK Nature Conservancy Council, IWRB staff will be working closely with National Coordinators on the West Palearctic flyways to improve census coverage for monitoring purposes. The aim will be to tailor the coverage specifically for the purpose of monitoring, and to speed up this flow of information, so that annual reports on the status and trends of Western Palearctic Waterfowl can be produced in the future.

Paul Rose
IWRB

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EDITORIAL

A Directory of Asian Wetlands

This directory is the culmination of a three year effort by IUCN, ICBP, and IWRB. The Indian section describes 93 wetlands including those in the Andamans, and seems to be a most valuable publication. S.A. Hussain, C.K. Varshney, and Prakash Gole must be complimented on the data they gathered for the Indian section. Each

wetland has information on Location, Area, Altitude, Description of site, Principal vegetation, Fauna, Conservation measures taken, and so on. Under several sub-headings, all that is said is : "No information available". This honest statement is much better than to include unauthentic material from hearsay. The coverage includes such large areas as the Great Rann of Kutch, as well as small water bodies within our Sanctuaries.

I was particularly interested to read about Nandur Madhameshwar, in the Nasik District of Maharashtra. In my school days in 1936, I accompanied a party of shikaris for duck shooting. It was the only time in my life that I fired a gun at a bird, and fortunately did not draw blood. Apparently this reservoir, formed by a dam across the Godavari, has been converted into a bird sanctuary since 1986. 235 species of birds are known to occur here, and up to 15000 waterfowl have been recorded in winter. Certainly a place worth visiting in the right season.

The Birds of Bihar

A few years ago Mrs. Jamal Ara sent me a file containing a description, a page each, of all species in Bihar. It is a commendable effort and is now kept in the BNHS as reference material. Culled from various sources at her disposal, information is given about distribution, migration, breeding and economic importance of each species. Incidentally I have lost touch with Mrs. Jamal Ara for the past few years, and I would welcome any information about her.

Saving Owls or Protecting Jobs

Aamir Ali has sent me a cutting from the Washington Post of September which says that Bush administration officials have concluded that saving the Pacific Northwest's rare northern spotted owl from extinction will require the sacrifice of up to 20,000 timber industry jobs. If the owls have to be saved large chunks of old growth forests where the owls live must be saved from logging. Only about 2.3 million acres of old growth forest remain out of the estimated 25 million which once covered the Northwest. This tussle between ecology and economics is interesting from the environmental point of view, and I will report later the outcome of this conflict.

Indian National Committee of the International Council for Bird Preservation

The BNHS has taken a lead in re-establishing the Indian section of the ICBP. It seems that until a few years ago the Bird Wing of the Indian Board for Wildlife, of which Salim

Ali was the Chairman represented the ICBP in India. After Salim Ali's death the Indian National Section expired, as it were, and now needs to be revived. S.A. Hussain of the BNHS sent out a circular to most of the natural history societies in India seeking their opinion about the manner in which the ICBP should function in India. 56 replies were received from the 108 Institutions/individuals addressed, and 36 are in favour of leaving the ICBP in the hands of

NGO's. Obviously a representative of the Government of India on the proposed Indian Committee would be essential, and the BNHS has written to Maneka Gandhi to help in taking this scheme forward. If our readers have any constructive suggestions to offer, about the role of the ICBP in India, they should write to the BNHS.

THERMOMETER BIRD (MEGAPODE) FACES EXTINCTION IN INDIA

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Introduction

Megapodes are a group of birds having large legs. They are the only known birds and indeed the only vertebrates above the level of reptiles that utilize heat other than that of the parents body for hatching the eggs. Among the primitive vertebrates turtles, alligators, crocodiles and snakes are known to possess this character. Megapodes are called by different names like Brush turkey, Scrub-fowl, Mallee-fowl, Mound builders, Thermometer birds and Incubator birds. These birds make use of the prominent yellow wattle around their neck, the tongue and the cheek for assessing the temperature. Hence they have earned the name "THERMOMETER BIRDS". These birds also dig holes whose depth would vary between one half to two metres with their powerful legs because of which they have earned the name MEGAPODE. This bird belongs to the family Megapodiidae (Aves : Galliformes).

Distribution

The Megapodiidae family include 7 genera and 12 species. On the basis of their appearance and size, the megapodes can be divided into 3 distinct groups. *Megapodius* (Scrub-fowl) is one of the first group whose members are found throughout the Islands of the Philippines, Pacific Islands, New Guinea, Indonesia, East Malaysia, Northern Australia as well as Nicobar Islands. The other members of this group are *Macrocephalon* (maleo) and *Eulipoa* (mamua) which are confined strictly to Sulawesi and Maluku Islands of Indonesia. Practically all the birds of the first group are smaller than the domestic fowl with dark or dark brown colour. They also bear longer legs.

The second group comprises the brush-turkey of which there are three genera. One among them endemic to the eastern coast of Australia is *Alectura*. The other two

brush-turkeys *Talegalla* and *Aepyodius* are native to Papua New Guinea. Brush turkeys are larger than the Scrub-fowl having large tails but flying less frequently.

The third group of megapodes represented by *Leipoa* (mallee-fowl) is black and white in colour and resembles brush-turkeys in shape. Its colouration is in harmony with the red-brown soil of the Mallee in Australia. While all the other species of megapodes live in tropical or sub-tropical regions with very heavy rainfall and lush vegetation, the home of the mallee-fowl is in the arid shrubs of inland Australia.

The Egg

The adult megapode is only as big as a domestic fowl, but the egg is 11cm long and weighing as much as 250g which is about 5 times the weight of a domestic hen egg. The weight of the hen's egg is only 3% of the adult body weight, but the megapode egg weighs 16% of the adult body weight. This is the highest ratios of the egg-to-body weight known. These eggs are considered not only wholesome rich food but they are also attributed to having invigorating and aphrodisiac properties which attract hunters.

The incubation period is considerably longer than that for birds of similar size. The domestic fowl for example needs only 21 days while the eggs of megapode need an incubation period of about 65-75 days. The slow development of the embryo inside the egg helps increasing the size of the young one at the time of hatching.

Nest

The members of the first group which live in forests away from the coast adopt the simplest method of incubating eggs. During the breeding seasons, they move nearer to the sea or to areas within forests with open sandy pockets. They prefer beaches fully exposed to the sun.

they care little for open areas. They even dig pits close to the stems of forest trees or under a thick canopy of low bush.

The birds also make use of solar heat. The dark volcanic ash or even the ordinary white sand and chips of rocks in the open areas is capable of retaining sun's heat more or less uniformly throughout the night at certain depths. On such open beaches or exposed inland areas eggs are laid in holes and the holes partially filled up with ash, soil or pebbles to cover the eggs. All these operations are carried out by the female alone.

Members of the second group of megapodes build mounds for laying eggs. But the size of the mound is not very large. For example the mound is just over one metre in height and 3 to 5 metres in diameter.

The mounds of the third group are the most sophisticated among the thermometer birds. The male and female birds of the third group come together only during the breeding season and the male may be engaged in working on the mound up to 8 months in the year. Since the diameter of the mound can be as large as 10 metres one can imagine the enormous amounts of earth the birds turnover with just their legs. During this operation the female watches and encourages her mate.

Egg Laying

The female lays eggs only when it finds a suitable nest mound. The bird makes a hole of about 19 inches deep in the mound and deposits an egg into it in order to protect it from enemies and also to maintain the temperature constant throughout the incubation period. The bird then covers it up by scratching material from all sides and stamps it down with alternate feet in a rapid prancing fashion. In the case of Mallee-fowl, the female just lays the eggs in a hole already dug by the male. But in the case of Scrub-fowl the female carries out all these operations alone.

In all the groups of megapodes the eggs are laid broad end up to enable the chick to keep its head up while burrowing through the fermenting heap of organic matter and soil to reach the surface. As the chicks are well developed during hatching they burrow up the sand mound. On coming up, with a strange instinct they fly to the parents in the forests even though they have never seen any adult megapode. This habit remains a myth to the bird watchers.

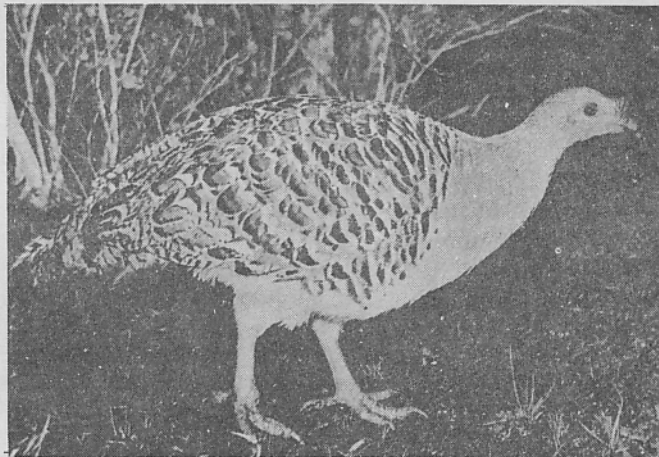
Factors for Extinction

The population of megapodes particularly *Megapodius freycinet nicobariensis* is dwindling day by day and so it has been declared as one of the endangered species in India. Presently this species is found only in Nicobar islands. Census on this bird reveals that there are only 50 birds found existing.

The reasons for the fast extinction of the birds are many. Megapodes cannot fly long distance in one stretch. Because of the massive size and wide-mouthed pits or by the presence of adults lingering near breeding territories they are easily spotted out. It is also recorded that one mound contains the egg of several females and thus they have the habit of community egg laying. The birds also make use of the same nest for several egg laying seasons. Once the breeding site is located the hunters continue to harvest the several eggs laid within each nest.

The next factor other than the poachers is the predators such as Varanus, Ant eater and Wild dog. In India Varanus is the only predator reported.

The Govt. of India is very much concerned over its protection. In this connection, the Ministry of Environment and Forests, Govt. of India, has entrusted the Haldane Research Centre, Nagercoil with the work of surveying, studying its habits and habitats and suggesting methods and means to multiply and to protect the megapode from extinction.



An adult Mallee-fowl (*Leipoa ocellata*)

BUSTARDS AND FLORICANS OF INDIA : INFORMATION WANTED

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There are 22 species of bustards in the world, of which six are reported from the Indian subcontinent (India, Pakistan, Nepal and Bangladesh). There is no authentic record of any species of bustards from Sri Lanka. Earlier, there were a few records of the Eastern Little Bustard *Tetrax tetrax orientalis* from Pakistan, Kashmir and Northern Indian plains but as the species became uncommon in most of its normal range, vagrant or stray records from fringes of its distribution also became rare. The same is the case with the Great Bustard *Otis tarda dybowskii*. This large, majestic bustard was seen sporadically in certain parts of Pakistan but as far as I know there is no recent record from that country. According to the Handbook of the Birds of India and Pakistan by Salim Ali and S. Dillon Ripley, all records were in severe winter, when the birds migrated further south than their normal range.

Of the remaining four species, which concern us here, the Great Indian Bustard *Ardeotis nigriceps* and the Lesser Florican *Sypheotides indica* are confined to the Indian subcontinent (India, Pakistan and Nepal), while the Houbara Bustard *Chlamydotis undulata* has a very wide range, covering the arid parts of Russia, the whole of West Asia, and North Africa. In our country it is migratory and seen only in winter in the Thar desert of Rajasthan and Gujarat, with few records from Saurashtra. The last species is the Bengal Florican *Houbaropsis bengalensis*, which is also more or less confined to India and Nepal, save for an old record from Kampuchea. Recently, Dr George Archibald of the International Crane Foundation, Wisconsin, USA, reported to have seen some Bengal Floricans in Vietnam. India has major populations of the Great Indian Bustard, the Lesser and the Bengal floricans and if we fail to protect them, none of them will survive.

During the last ten years, my colleagues and I did research on the Indian bustards and we have collected lots of information on their behaviour and present distribution but we feel that a lot more has to be learnt, and moreover, a lot more has to be done to save these beleaguered birds.

The main purpose of this article is to introduce these interesting birds to the readers of *Newsletter* and to solicit information about the sight records. I have collected published records of the three bustard species (Great Indian Bustard, Lesser Florican and Bengal Florican) but I feel, many of our readers and fellow ornithologists must be having records unknown to me. Moreover, as the number

of ornithologists and birdwatchers is growing, especially among youngsters, I request them to keep records of all the endangered species which they see during their travel and inform me of sightings of bustards and floricans.

1. Great Indian Bustard

Perhaps due to its game bird status many hunters and ornithologists have reported its sightings. I have collected up to 70 records from the pages of the Journal of the Bombay Natural History Society and, from the old, now defunct journal called Stray Feathers. Nearly 100 years ago, the Great Indian Bustard was a common bird of the short grass plains and arid areas of the Indian peninsula. It occurred from Uttar Pradesh and Punjab in the north to Tamil Nadu in the south and from Orissa in the east to Sind in Pakistan in the west. Shooting and destruction of its grassland habitat played a major role in the rarity of this grand bird. Now it is present in isolated pockets in Madhya Pradesh, Maharashtra, Gujarat, Andhra Pradesh, Karnataka and Rajasthan. Thanks to active conservation measures taken during the last 10 years, its population is stable or increasing in sanctuaries specially developed for it.

The major problem in the conservation of the Great Indian Bustard is that it has a wide and somewhat unpredictable movement, which depends on the rainfall of the area. Even in the bustard sanctuaries such as Rollapadu in Andhra Pradesh and Nanaj in Maharashtra, bustards are not seen for most of the year. They come to these areas during the monsoon for breeding and leave once the chicks are fledged. Where do they go? In spite of working on the bustards for the last eight years, I do not have an answer. As the species is on Schedule I of the Wildlife (Protection) Act, we were not allowed to catch and tag birds for identification nor were we allowed to use telemetry to follow their movement.

After reading my earlier articles on the bustard, many people wrote to me about their experience and sightings of bustards. For instance Mr R.R. Bharos (now deceased) from Raipur wrote to me in 1985 that bustards were found in good numbers between Tilda on S.E. Railway and Khara on Pillari road, which was, and still is, suitable for the bustard. Fortunately, his son, Mr. Arun M.K. Bharos is also a birdwatcher and he is taking active interest to locate

bustards in that area. From Pune, Mr. Sanjeeva B. Nalvade informed me that he saw two bustards near Jejuri town, about 45 km from Pune. From Karnataka, Dr. M.R. Desai, Hony Wildlife Warden of Bijapur district, wrote to me that on 15 August 1988, he saw a solitary bustard near Bilgi, and a young man named Mohuiddin excitedly described his sighting of two bustards near Rampura village, about 4 km from Raichur. I have similar records from other states also. Such individual records, if not compiled from time to time, are lost to science.

2. Houbara Bustard

The Houbara Bustard is seen in India in winter in the Thar desert of Rajasthan and Gujarat and vagrantly in the Saurashtra peninsula. C. Sasikumar in November 1986 found a Houbara in Kasargod district of Kerala. This is the first record of a Houbara in south India. However, it was a case of accidental drifting of a disoriented bird during migration.

Houbara is the favourite bird of falconers and large numbers are killed every year, especially in Pakistan, Iraq, Algeria, Morocco and the Arabian peninsula. Although, the Houbara is totally protected in our country, I have seen people, perhaps government officers, in government jeep poaching this bird in Bikaner district. Everywhere the population of Houbara has gone down and now every sighting has become important. Readers visiting the Thar desert in winter are requested to note and enquire about this bird.

3. Lesser Florican

The Lesser Florican is perhaps the most elegant bustard of the world. The adult cock, which stands 46 cm has a glossy black belly and neck, white patches on the wings and upper parts sandy buff, mottled with black streaks. Its beauty is enhanced by three pairs of upcurving black plumes projecting behind the head. From a distance, to a layman, it looks like a miniature peacock, hence its popular name 'Khar mur' or 'grass peacock'. The hen florican, which is slightly bigger than the cock, is mainly sandy buff in colour, mottled with black streaks. She lacks head plumes.

Like most of the bustards, the Lesser Florican also prefers grasslands. Except for the northeast and the Himalayas, it was reported from all over India wherever suitable grasslands were found. However, during the breeding season, which is during the monsoon when fresh grass grows, it is seen in Gujarat, eastern Rajasthan and western Madhya Pradesh. Earlier, when the habitat was suitable, it was a common breeding bird of the Deccan region, especially around Solapur and Mysore, but now

with the destruction of grasslands, I doubt if any floricans breed there. Nevertheless, in 1987 my colleagues Ranjit Manakadan and Ravi Sankaran found it breeding in the Rollapadu grasslands of Kurnool district of Andhra Pradesh. There are some indications that the florican may also be breeding in the Vidarbha region of Maharashtra, especially in good rainfall years. I suspect that there must be many grass patches, both private and government-owned, in Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Rajasthan and Madhya Pradesh where the Lesser Florican must be breeding. As it is not physically possible for one or two researchers to visit these grasslands simultaneously, I request the readers to write to me if they know any such area.

4. Bengal Florican

The Bengal Florican is an indicator species of the wet grassland of the Himalayan *terai*, *duars* of West Bengal and the Brahmaputra valley. Its situation is not very different from its smaller cousin described earlier. Owing to human population pressure, nearly ninety percent of the grasslands have been destroyed, either by agricultural fields, overgrazing or misguided forest plantations. It is supposed to be extinct in Bangladesh and extremely rare in Nepal and India. I do not have any information of the population in Kampuchea where the birds were seen in 1935 but recently it was seen in Vietnam.

In India, the Bengal florican survives in some of the most spectacular sanctuaries such as Kaziranga, Manas, Orang and Pabitora in Assam, Jaldapara in West Bengal and Dudwa in Uttar Pradesh. A small population might be surviving in Lagga-Bagga forest in Palibhit district of Uttar Pradesh which adjoins Sukla Phanta wildlife sanctuary of Nepal where this bird is definitely present. Our estimate is that not more than 400 Bengal Floricans are left in the whole world, giving it the unfortunate distinction of being the most endangered bustard of the world.

Similar to the Lesser Florican, the Bengal Florican also shows sexual dimorphism in which males and females have different plumages. The male is conspicuous with glistening black head, neck and underparts. The back is buff-brown, heavily mottled and vermiculated with black arrowhead marks. In the breeding plumage, elongated plumes from the back of the neck hang over the breast. The spotless white wings are conspicuous in flight but show as narrow white patch when closed. The female florican is over-all rufous buff or sandy-buff, mottled with black on the back. The neck is slender and longer and wings have a light patch which shows in flight.

Not much is known about the biology of the Bengal Florican because most of the time it lives in areas with tall grass where following it is not easy. All our attempts with

the Government to get permission for telemetry failed and in spite of five years of field work, we could not unravel the secrets of the life of this rare bird. Nevertheless, our studies with basic methods show that the Bengal Florican is not dissimilar to other bustards. Males are more or less traditional and during the breeding season, return to the same patch of grassland. Here they perform spectacular courtship displays to attract hens. The male springs up diagonally at an angle of about 45°. A loud wing-flapping sound is made while ascending and on reaching a peak of about 3 to 4 metres, the wings are opened displaying the glistening white wing feathers against the jet black body. Now it produces 'chip- chip' sound and flies forward for about 20 metres and floats down more or less vertically with wings partially opened. The bird which spends most of its time on the ground, skulking in the grass, becomes a white flashing object during the display. Not much is known about the breeding biology. The only thing which we are sure of is that after mating the male does not take any part in incubation and rearing of the chick.

Despite our wide travels and intensive surveys in the *terai* of Uttar Pradesh, some parts of Bihar, and the Brahmaputra valley, I suspect that we must have missed many areas where this bird might still be present. This was proved to me when Nitin Pandya, a member of the WWF and BNHS wrote to me in July 1990 about his sighting of 12 floricans in D'Ering Memorial Wildlife Sanctuary in Arunachal Pradesh. Similarly, during our preliminary visit in 1985, we did not see any florican in Jaldapara sanctuary in West Bengal, but in 1988 and 1989 we saw two displaying males. It is easy to miss these rare and elusive birds during one or two days of visits. My colleague Goutam Narayan found two male floricans in a small patch of private grassland of a tea garden in West Bengal. If the readers of *Newsletter* know a good patch of wet grassland, anywhere in Uttar Pradesh, Bihar, West Bengal or Assam, they can write to me. I also hope the Bengal florican still survives in Bangladesh. When it can survive in Vietnam, in spite of massive habitat destruction, including spraying of herbicide and carpet bombing, why cannot it survive in some parts of Bangladesh? This is only a wish, which I think any one working on the endangered species should have.

Whenever, I hear of sighting of a florican or a bustard in a place where I had not seen it, it gives me immense pleasure because it shows that a few more birds are alive. Such sight records, if properly compiled, greatly help in better understanding the distribution of the species and also in its conservation.

CORRESPONDENCE

ON SIGHTING THE SHAHEEN FALCON (*FALCO PEREGRINUS PEREGRINATOR*) ON THE INDIAN INSTITUTE OF SCIENCE CAMPUS
 DR. R.J. RANJIT DANIELS, *Centre for Ecological Science, Indian Institute of Science, Bangalore 560 012*

While walking past the central office building of the Indian Institute of Science in the morning of 22.8.90, I noticed some peculiar behaviour in pariah kite flying in circles over the tall tower. The kite made some unusual sounds and periodically swooped down as if it was trying to pick something off the tower. This tower is the permanent haunt of a pair of white scavenger vultures and huge colonies of the often aggressive rock bees. These were all there and yet not disturbed by the kites unusual behaviour. However, in a short while, following one more attack, a fairly big sized falcon flew out overhead and soon out of sight behind the tall trees. It appeared to me like the shaheen falcon thanks to the good lighting which clearly revealed the characteristic rufous underside and the white throat. I was indeed fortunate as the falcon very soon flew in again right over me to land at the same site on the tower. It was definitely the shaheen falcon. I went there again on 23.8.90 to see the bird. It was not there.

The shaheen falcon, as much as I am aware of, has not been reported from the urban limits of Bangalore hitherto. There have been two reports of unidentified falcons by amateur birdwatchers on the campus during April and September, 1986. These could have been of the shaheen falcon or some other species. I am not sure. The reporters were however fairly sure that the falcon sighted by them was neither the redheaded merlin, a rather common resident in and around the campus nor the kestrel, a common winter visitor to this part of Bangalore.

Tall concrete or stone buildings/towers in well planted neighbourhoods are probably attractive to the shaheen falcon as are to the white scavenger vultures, the rock pigeons and the rock bees. In Uttara Kannada district I have come across pairs of shaheen falcon on the rocky cliffs associated with the high waterfalls and other pinnacles of rock outcrops. These are also the favourite habitats of rock pigeons and bees. While monitoring the resident populations of the shaheen falcon, it may also be appropriate to make some assessment of the availability of the preferred habitat of the species wherever it occurs.

STATUS OF ENDANGERED RESIDENT SPECIES OF WATERFOWL AT KOTA IN EASTERN RAJASTHAN. RAKESH VYAS, 2-P-22, Vigyan Nagar, Kota 324 005

The note by C. Perennou, Scientific Officer, IWRB in *Newsletter* May-June issue made interesting reading. He has cited a few endangered resident species of waterfowl

in India, which require close monitoring and identification and preservation of habitat. From the given list of nine species, I have found three either residing or constantly appearing in the vicinity of Kota City in eastern Rajasthan. These birds are usually missed out during midwinter waterfowl census, because of their appearance in different times of the year. So, I felt a need to record these observations immediately on reading the said note.

There is a network of medium and small size dams, canals, irrigation reservoirs and village tanks in the area, which support a wide variety of resident and migratory waterfowl. I have been observing Indian Skimmer *Rynchops albicollis*, Oriental Darter *Anhinga melanogaster* and Blacknecked Stork *Ephippiorhynchus asiaticus* from time to time in this area. The noteworthy sites for these observations are Alniya dam, Ummedganj Pond and Ranpur village tank.

Oriental Darter *Anhinga melanogaster* - I have been observing Darters at Ummedganj pond for past two years. They seem to be permanent residents as the sightings are recorded in each month of the year. I have recorded the maximum number of 11 Darters on 3.4.89, 6.12.89 and 20.12.89, but 2-3 Darters are always present at the site in each month of the year. I have also recorded 1-4 Darters at Alniya Dam during April, June, November, December and January of the year 89-90.

Blacknecked Stork *Ephippiorhynchus asiaticus* - A graceful bird indeed! A pleasure to watch! A rare sight! It was during the 89-90 winter that I saw these storks in this area. On two occasions, 18.11.89 and 11.1.90, I observed one Blacknecked Stork feeding in the shallow waters of Alniya dam. On 13th Jan'90, when the water had become very shallow due to let-out of water for irrigation, I saw 9 Blacknecked Storks. It was a day, when a great number of storks, egrets, White pelicans, Blacktailed Godwits, Spoonbills, Saras cranes, Bar headed and Greylag greese, Brahminy ducks, cormorants, Common Teals, Common Pochards and Pintails were having a field day as the shallow water of the dam was boiling with jumping fishes of all sizes. A large number of dead or dying molluscs and crabs were scattered all over the muddy banks of the dam. The Blacknecked Storks were seen feeding on fishes.

Indian Skimmer *Rynchops albicollis* - The compact book of Indian birds by Salim Ali & S. Dillon Ripley states it to be a very rare vagrant on inland tanks, but I have recorded it at least five times in the area under study. My record book shows the following entries:

ALNIYA DAM	14.5.89	-	7
	8.7.89	-	1
	23.7.89	-	1
RANPUR TANK	7.1.90	-	1
	10.2.90	-	1

Out of these five sightings, only once (14.5.90) Indian Skimmers (7) were seen sitting on the sandy island with

River Terns and gulls. Every now and then one or two Skimmers used to fly off to return after some time without actually feeding. At other times a single Skimmer was seen knifing the water and flying low in search of food.

I would also like to report the occurrence of following three species of birds. Their presence in the area may be termed as very rare and could be accidental.

Black Stork *Ciconia nigra* - While undertaking the midwinter waterfowl census on 13th Jan.1990, I saw one Black Stork at Alniya dam. This medium sized stork was distinguishable from all others by its black colour and bronze sheen, white armpits and belly. It kept its distance from all the other storks and waterfowl feeding nearby and after some time retreated to a drier place to preen itself.

Spurwinged Plover *Vanellus spinosus* - In the beginning of the summer of 89, on 20th April, I saw a pair of Plovers on the rocky bank of Alniya dam feeding on worms and small molluscs. They were almost like Redwattled Lapwings in size, but they were sandy brown with a black tail, a black spot on the abdomen, grey legs and culmen. This is probably the first record for the area.

Cinereous Vulture *Aegypius monachus* - On a winter afternoon (18.11.89), while on a nature trail, I saw a group of White-backed Vultures *Gyps bengalensis* on a carcass about 50 ft. from the road. In the centre of the flock, a large black vulture was also seen feeding. It was head and shoulders above the rest with its black body and ruff. The head was triangular, unlike the round head of the common vultures of the area. There was no trace of white on the body or red on the head to confuse it with King Vulture. Finally, its size settled the issue and on checking the books, I found that it was the rare Cinereous Vulture. As I moved closer to the flock, it flew off and settled at a distance of about 200 metres on a tree. The White-backed Vultures were unmoved as they were quite accustomed to human presence at close quarters, but our new found friend was very wary. As I approached the tree, it took to its wings once again to become a speck in the skies.

OCCURRENCE OF BALDHEADED COMMON MYNA (*ACRIDOTHERES TRISTIS*) AT ALIGARH. DR. H.S.A. YAHYA, Lecturer, Centre of Wildlife & Ornithology, Aligarh Muslim University, Aligarh

I have been watching and studying birds in and around Aligarh for the last five years (1986-90) and so far have recorded over 200 species - resident and migratory (Yahya et al.1990). In 1989 I observed 2 Common Mynas, *Acridotheres tristis* each pairing with a baldheaded myna. One pair was observed near the Exhibition ground, while the other pair stays just around my residence. Since the phenomenon was interesting, I kept watch on the pair living near my residence. In August 1989 the pair bred and out of the two successful fledglings one was found to be

baldheaded. The parents fed both the fledglings normally, and except for the baldness there was nothing abnormal either in the parent baldheaded myna or in the young baldheaded. The pair is still living and comes to our house almost every morning for scavenging.

There are 3 long, thin hair like, feathers on the yellow head of the baldheaded myna and most probably in each case it is the female. While scanning the available literature I found no mention of this particular phenomenon in Mynas (Ali & Ripley 1983 and Sengupta 1982) or in any other bird (Information provided by any reader will be most welcome).

In the present case it is difficult to ascertain whether this abnormality is a genetic deformity or an outcome of environmental deterioration. But considering that three Mynas are suffering from the baldness, it appears that the polluted environment is playing a vital role in the baldness of Mynas and the illness/death of crows *Corvus* sp. (Yahya 1990) in and around Aligarh. These birds living close to human beings can be reliably considered as 'indicator species'. Futehally (1990) has rightly suggested that because of their fast metabolism birds absorb pollution sooner than humans and can act as an early warning system.

PRECOCIOUS DISPLAY BEHAVIOUR IN BIRDS. ASAD R. RAHMANI, Senior Scientist, Bombay Natural History Society, Bombay 400 023

Courtship display is generally considered innate in most species of birds. This was proved to me when I saw a six day old Peafowl *Pavo cristatus* chick cocking the tail and displaying to other chicks. More than 20 years ago, at Badaun in Uttar Pradesh, where my father was posted, there were many Peafowls around our house which was outside the town. One day I saw a boy running away with three peahen eggs, which were easily retrieved from him after appropriately threatening him. As the nest was near the road and the boy had already seen the nest, it was not possible to save them from future raids so I decided to keep them under a bantam fowl, of which we had many. All the three eggs hatched - two being male and one female. Fortunately I was able to raise all the three chicks to adulthood and left them with their wild cousins when we were transferred from Badaun. I noticed the incipient courtship behaviour of one chick (which later proved to be a male) at the age of six days. The chick cocked its tiny tail feathers and moved around one chick (sex unknown), just like an adult peacock during courtship dancing.

Precocial courtship behaviour is not unknown in birds. Recently I read in an old issue of the American journal *Wilson Bulletin* (vol.85, pages 472-473, 1973) that chicks of Sharp-tailed Grouse *Pedioecetes phasianellus* have been seen to exhibit complex behaviour patterns similar to that shown by adult males on the dancing grounds, and adult-like sexual response is seen in domestic cocks as young as 4 days of age.

At Rollapadu Bustard Sanctuary in Andhra Pradesh, my colleague Ranjit Manakadan was given a bustard chick by a villager who found it in his crop field. We reared the chick from an estimated age of 20 days. When it was nearly 400 days old (but still a juvenile), we saw it indulging in the typical courtship display of an adult cock. Displays consisted of cocking tail feathers, lowering wings and some foot movement. It emitted gkroo-gkroo sound, during which the bill was pushed upwards at about an angle of 45°. There was no inflation of the gular pouch as in the adult cock. According to available literature, a male bustard becomes adult at the age of 4-5 years (when it starts displaying) but we saw the display when the cock was still subadult.

Precocious display can be expected only in precocial and nidifugous birds in which the chicks hatch at an advanced stage of development and become active soon after hatching.

SAVING A LAKE IN SURAT. SNEHAL S. PATEL, 81, Sarjan Society, Umra Jakat Naka, Surat 395 007

The Gavier lake (7 km. from Surat) which sheltered hundreds of birds like Sarus cranes, Pheasant-tailed Jacana, Purple moorhens, Coots, Purple herons, Grey herons and a variety of migratory birds as well as turtles and numerous other aquatic life was being drained off and dug up by the water supply and sewage board to make it a fresh water reservoir for water supply to nearby villages.

The members of Nature Club, Surat found shells of turtles which were eaten up by the workers on the site. They also found abandoned nests of birds. There were 14 tractors excavating the wetland and about 80 people working from early morning to late night to finish off the work before monsoon. Seeing a beautiful and rich wetland being destroyed was unbearable to nature club members.

On behalf of the dumb animals and birds whose habitat was being destroyed, Nature Club, Surat, brought stay order from court and the work was halted. The water supply and sewage board's officials were very cooperative and agreed to wall the part of lake which was still undisturbed to form a new lake right next to the original lake for the birds.

Also the vegetation which is dug up from the existing lake will be planted in the new lake and all the turtles emerging while excavating the old lake will be put in the new lake. The new lake will be ready with vegetation to receive the migratory birds by winter (that is when they start coming from Europe and Russia).

Normally when dams are built, the villages which are in the submergence zone are relocated and the citizens are rehabilitated. Similarly in this case, the birds and animals have been provided with a new lake to settle in, thus considering them equal to human beings.

This is an historic event for our country and the Gujarat Water Supply and Sewage Board has set an example for others to follow.

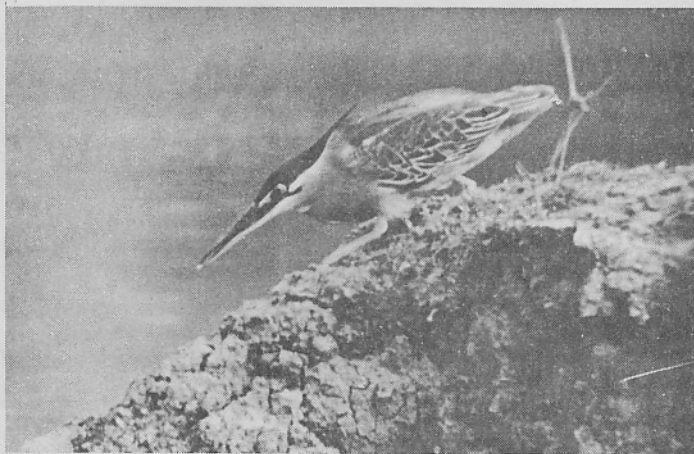
SPOTTED GREY CREEPER AND COMMON BABBLER. V. SANTHARAM, 68, 1 Floor, Santhome High Road, Madras 600 028

With reference to the notes on Petuparai birds, Kodaikanal, by Arthur Steele NLBW:XXX (7 & 8), I wish to draw attention to the Spotted Grey Creeper which the author had observed in Kodaikanal. This sighting is of great interest as the species distribution is restricted to northern and central India, as per the *Handbook*. Mr Steele should publish a more detailed note on this sighting.

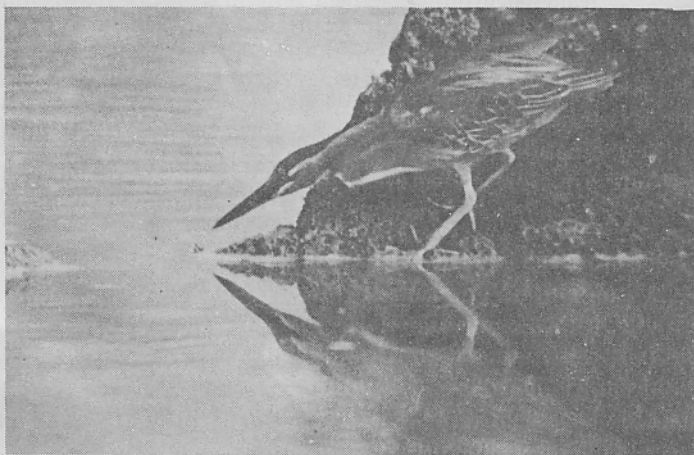
The occurrence of Common Babbler in Petuparai is rather unlikely given the habitat and altitude. Perhaps there was an error somewhere. Could this be looked into and rectified?

BAITING HABIT OF THE LITTLE GREEN HERON. HARSHAVARDHANA BHAT, Regional Resources Centre, M.C.M. College, Udipi 576 101

Baiting habit of the Little Green Heron *Butorides striatus* was observed and recorded on slide film on the first of April 1990 at Malyadi wetland, about 28 km north of



The Little Green Heron comes down a slope at the edge of water with a small bait in its beak. (The bait is at the tip of the beak)



The bird drops the bait on to the water to float and prepares itself to strike

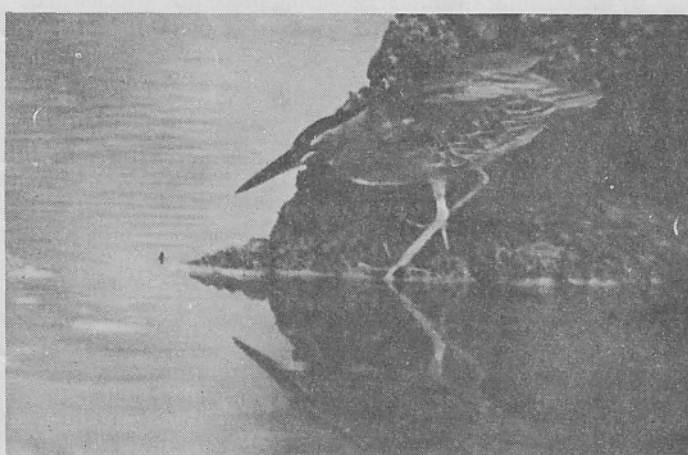
Udipi. I had a planned target on this day for photographing the same bird at a previously observed place where the bird frequented. After I sat inside my blind, the bird came down a slope at the edge of water with a small bait in its beak. I watched and photographed the bird put the bait to float on water - which it did three times picking up the same bait again and again. However, the bird was not successful in getting its prey. The kind of bait it brought is not known. It has been reported that American Green-backed Heron *Butorides striatus* also has a similar habit which is published in the book 'Wonder of Birds', 1983, published by the National Geographic Society.

CATTLE EGRET FEEDS ON TOAD. SATISH KUMAR SHARMA, Arboriculturist, World Forestry Arboretum, Jhalana Dungri, Jaipur 302 004

Since 1986, I have been studying the feeding behaviour of Cattle Egrets *Bubulcus ibis* at Sitamata Forest Nursery of Social Forestry Division, Udaipur (North), near Pichhola Lake. On 26.5.1990, at about 1145 hr., while polythene bags, containing saplings, were being shifted from one bed to another a Toad *Bufo melanostictus* came out from its



The bait is still at the tip of the beak



However, the bird fails to catch its prey

hideout. A Cattle Egret, which was sitting on the top of a *Delonix regia* tree, alighted on the ground near the toad and started striking the toad with its bill. The blows were quick and powerful and lasted for five minutes, till the victim became almost dead. Then it was picked up in its bill and carried near a water channel and dipped into the water, shaking it several times to remove the earth coated on its skin. This was probably to make the prey swallowable. Then the bird slowly started swallowing the prey taking in the head first. Very soon, a knot-like bulge appeared in the upper part of the neck. The bulge remained at the very spot for five minutes. It appeared that the bird was feeling some discomfort due to the oversize of the prey. When swallowing became difficult, the bird took four sips of water, probably to facilitate the process. It was amazing that just after drinking the water the bulge disappeared indicating the bird's success in swallowing the toad.

ASIAN MID-WINTER WATERFOWL CENSUS. *Christian Perennou, IWRB, Slimbridge, Gloucester, U.K.*

The first Asian Waterfowl Census was carried out in January 1987. Although this census was primarily concerned with the Indian Subcontinent, the neighboring countries of Burma and Thailand were invited to participate, and the results of the 1987 censuses in Hong Kong and Iran were included in the final report. The success of the first Asian Waterfowl Census far exceeded the expectations of the organizers.

The objectives of the Asian Waterfowl Census may now be formulated as follows :

- to obtain information on waterfowl populations at wetlands in Asia during the midwinter period (January), as a basis for evaluation of sites and monitoring of populations;
- to encourage a greater interest in wetlands and waterfowl amongst governmental, non-governmental and private individuals, and thereby promote the conservation of wetlands in Asia.

By establishing an annual censusing procedure which can be continued indefinitely, it will be possible to monitor the fortunes of sites and species on a long-term basis. Although we are unlikely ever to achieve complete coverage of sites and species throughout the region, it should be possible to develop analytical procedures whereby populations of most species can be monitored effectively on the basis of counts at a sample of sites. In the short term, the counts can provide very valuable information on the importance of particular sites and the distribution of species. They enable us to identify key sites for particular species, and provide us with a sound basis for monitoring at individual sites.

Hints to Counters :

As in previous years, there are two separate forms : the Count Unit Form (green) and the Waterfowl Count Form (White).

If a Count Unit Form has already been completed for a particular site and sent to IWRB, this need not be done again.

However, green forms should be completed for all new sites. Please check that the geographical coordinates are given correctly, as these will form the basis of the site code in the computer database. Sketch maps of the sites are particularly useful, and should show the boundaries of the area counted.

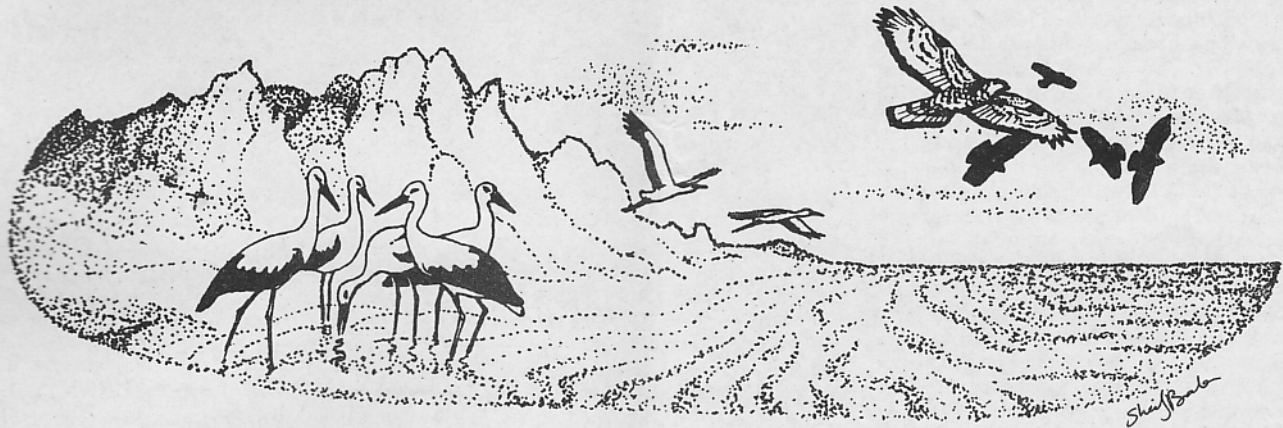
The census forms should be filled out as completely as possible and returned either to relevant national or regional coordinator or directly to IWRB by the end of February at the latest.

The official dates for the 1991 Census are 4 to 21 January inclusive. This period includes three weekends to give as much time as possible to individuals who can only carry out counts on their days off from work. If sufficient manpower is available, the counts should be centered around the weekend of 12/13 January. As in previous years, we will continue to accept counts carried out in December and February, especially from poorly known areas, but these counts are much less useful for analysis purposes because they could include large numbers of birds counted elsewhere during January.

- Please try to count all the waterfowl present
- Try to give a figure for the number of individuals of each species present. Terms such as "thousands" are not very helpful.
- Try to avoid giving ranges, e.g. 100-200 and instead give the figure which you consider most likely to be correct.
- If you fail to find any waterfowl at a wetland which is known to have held significant numbers of birds in the past, please complete a census form any way, and note that no birds were present. If possible, give the reason for the absence of birds (e.g. wetland frozen over, wetland completely dry, or site much disturbed by hunters).
- Try to visit all the sites that you visited last year, as well as a number of new sites. Obviously we want to extend our coverage to as many sites as possible, but the most useful information will come from regular counts at the same sites by the same observers.
- Try to avoid duplication of effort. In 1990 as in previous years we often received two or more census forms for the same site. In some cases, two members of the same count team sent in forms independently; in some cases two teams visited the same site on the same day and sent in separate census forms; and in some cases counts were carried out on different dates by different observers. Whenever possible, counters should liaise with one another and produce a single census form which gives the results of their combined efforts.
- Please double-check all your entries on the count forms. In particular, check to see that you have not inadvertently inserted a figure on the wrong line or confused species names.
- Please write as clearly as possible, and be sure to give your full name and address on the Waterfowl Count Form. Otherwise we might not be able to send you a copy of the final report.

GOOD LUCK with the 1991 Mid-winter census !

EGYPT EXAMINED



Egypt is a vital stop-over for many millions of migrating birds, but it is no longer the safe haven they need during their hazardous journey. Here, ICBP representatives in Egypt, Mindy and Sherif Baha El Din, describe the threats to birds in Egypt and the conservation work going on there.

Mention Egypt to most people and they immediately think of pyramids, the Nile and vast deserts. But for ornithologists, Egypt represents a natural wonder equally shrouded in mystery and awe: the biannual spectacle of bird migration. Today, as in the days of the Pharaohs, the country is vital to millions of migratory birds returning from their summer breeding grounds in Europe or Asia. For some species, Egypt is the end of the road, and they will spend the winter in the lakes in the north of the country, which make up 25% of wetlands in the Mediterranean. For others, it is a crucial resting post before they continue onward to sites in the south of the continent.

Hunting horrors

The problems facing birds in Egypt are great and often difficult to solve. There has been a drastic change in the composition of the wintering waterbird population in the past ten years, and a major decline in the numbers of once common species of duck. Many factors have contributed to this, the most repugnant of which is hunting. We have witnessed absolutely appalling scenes of bird slaughter, most of the culprits being European tourists indulging in a little "sport". At Lake Qarun, for example, thousands of birds, many protected by Egyptian law, were being indiscriminately shot by foreign hunters, mostly

from Malta, Italy and France. Populations of once common resident birds, such as Black-shouldered Kite *Elanus caeruleus*, Little Green Bee-eater *Merops orientalis*, Senegal Coucal *Centropus senegalensis* and Kestrel *Falco tinnunculus*, are now seriously depleted. We have also seen a hunter shoot a pair of Little Owls *Athene noctua*, and Egyptian hunting guides dragging garbage bags full of dead birds into a hotel to lay at the feet of gloating Italian hunters.

As in ancient times, the Egyptians also hunt birds for food. Large numbers of passerines are netted by bedouins for consumption and in the autumn, tens of

thousands of Quail *Coturnix coturnix* are caught on the Mediterranean coast. Falcon trapping is reaching epidemic proportions in Egypt, with smaller birds of prey also being caught and used as decoys.

Recently, however, the Ornithological Societies of both Malta and Egypt have alerted the international community to the situation, and many ICBP sections and member organisations have written to the Egyptian government. Positive steps have been taken by the Egyptian authorities to regulate hunting by tourists and there are now notices prohibiting it at Lake Qarun.



White Pelicans for sale at a butcher's stall, Egypt (Photo: R. Stouthamer)

Pollution problems

There are other threats facing birds and their habitats in Egypt too. As always, habitat destruction is a major problem, and the valuable wetlands are rapidly shrinking due to land reclamation. The coastlines in Egypt are being developed for tourism and although some new bird habitats have been created, many are being destroyed.

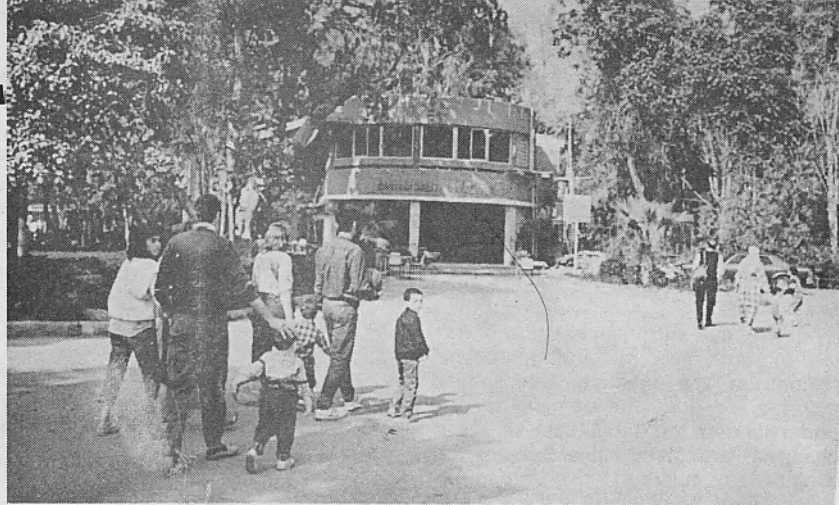
The Delta Lakes, especially Lake Manzalla, are seriously polluted with agricultural drainage water, industrial effluent and sewage from Cairo and surrounding cities. The ICBP-IWRB-FORE-EWS survey of Egyptian wetlands conducted this winter concluded that this pollution is a major cause of the changes in the populations of wintering birds. Oil pollution is also an ever-present problem, especially in the Gulf of Suez and on the coast of the Red Sea.

Insecticides are believed to be responsible for the decline of many species; since the building of the Aswan High Dam, there has been a growing reliance in Egypt on pesticides. A campaign to control rats with rodenticide in the early 1980s is thought to have caused the disappearance of many natural predators, including some birds, and today chemical substances are being targeted at birds themselves that are considered pests.

Looking at the long-term

One of the major long-term problems in Egypt is the almost total lack of public understanding of conservation issues of any sort. In 1988 ICBP, under the auspices of its Migratory Birds Programme and in collaboration with the Egyptian Wildlife Service (EWS), launched a three-year project in the country. The main objective of the project is to generate awareness of the country's rich natural heritage and to encourage the sustainable use and preservation of this valuable national resource. The core grant was provided by the Dutch bird protection society Vogelbescherming, and Giza Zoo, with its 5 million Egyptian visitors each year, is proving to be an ideal base. Children are the primary target of the project, but it aims to influence Egyptians of all ages and walks of life.

During the past two and a half years the project has concentrated on training EWS education staff and producing educational materials in Arabic. For three consecutive summers the education staff



The Education Centre at Giza Zoo (Photo: S. Baha El Din)

have attended courses at the International Centre for Conservation Education, funded in part by the British Council, where they have learned conservation education techniques. Posters, booklets and stickers have been produced and equipment for slide-shows purchased. A colour book of birds for Egyptian children and an Arabic version of the ICBP *Flying Visitors* poster have both just been published.

This September saw the opening of a conservation education centre at Giza Zoo. This represents the achievement of one of the principal goals of the project. The centre, partly funded by the Ministry of Agriculture, is the first of its kind in the country and contains an auditorium, a classroom and offices. It is anticipated that 20,000-40,000 Egyptians will attend programmes at the centre each year. There will also be workshops for teachers and environmental officers from different regions. Of course, not all Egyptians will be able to visit the zoo,

and a portable unit has been launched to take the message to people around the country.

Shaping the future

The project is also supporting non-governmental conservation organisations, such as the newly founded Egyptian Wildlife Society. Funds have been donated to the society for the production of promotional material and a colour magazine, to generate awareness of Egyptian wildlife. However, it must be remembered that conservation education is a long-term process and attitudes will not change overnight. Further local and international support is needed to ensure that migratory birds and important habitats in Egypt are preserved for the benefit and enjoyment of future generations. It must be realised immediately, not in two thousand years time, that Egypt's natural heritage is as valuable as its antiquities.

Staff at Giza Zoo distribute information leaflets to Egyptian children (Photo: S. Baha El Din)



Courtesy: World Birdwatch - Sept 1990

Cover: Whitespotted Fantail Flycatcher *Rhipidura albogularis*. Waltizing, pirouetting and dancing gracefully with a fanned-out tail, often producing tingling notes, this is one bird that does not sit still, even at the nest. The wine glass-shaped nest takes a lot of care to build, insulated as it is with cobweb.

Photo S. Sridhar

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